REMARKS

In the Office Action, dated March 2, 2006, the Examiner states that Claims 1-26 are pending, Claims 1-6 are rejected and Claims 7-26 are withdrawn. By the present Amendment, Applicant amends the claims.

In the Office Action, Claim 4 is objected to for a misspelling. Claim 4 has been cancelled, and the objection is now moot.

In the Office Action, Claims 1-6 are rejected under 35 U.S.C. §112, first paragraph. Specifically, the rejection indicates that there is no support for the feature of Claim 1 of "heating while moving a heating device in the Z-direction relative to the substrate surface". The Applicant respectfully disagrees and directs the Examiner to page 25, lines 4 to 6 of the application.

In the Office Action, Claims 1-3 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kawase (US 6,730,357) in view of Gordon et al. (US 4,811,038) and Nanto et al. (US 5,921,836). Dependent Claim 4 is rejected in further view of Pham et al. (US 2002/0127344). Dependent Claim 5 is rejected in further view of Noguchi et al. (US 5,606,356). Dependent Claim 6 is rejected in further view of Mian et al. (US 6,319,469). The Applicant considers that the amendment of independent Claim 1 overcomes these rejections.

Claim 1 has been amended to incorporate the features of Claim 4.

The invention described in Claim 1 is a method for manufacturing an organic EL display, in which a process of "discharge-placing at least an organic EL material in a form of solution on a substrate" and a process of "drying the organic EL material in a form of ink immediately after placed on the substrate by heating while controlling the temperature of the substrate so the temperature of the substrate does not rise and relatively moving a heating device in X (longitudinal), Y (lateral), and Z (up and down) direction to the substrate" are carried out sequentially and continuously. Accordingly, the organic EL material is forcibly dried by heating, while controlling the temperature of the substrate, immediately after being discharged on the substrate.

In the present invention, since the heating device moves in X (longitudinal), Y (lateral), and Z (up and down) directions relative to the substrate, the device can effectively move to a region where the organic EL material is placed on the substrate immediately after its placement. Thus, it is possible to dry the organic EL material to

form an organic EL layer that is very flat. Furthermore, even in the case when the organic EL material is coated in such a manner that the heating device reciprocates in parallel to the substrate, since the heating device moves in X (longitudinal), Y (lateral), and Z (up and down) directions relative to the substrate, the device can effectively move to a region where the organic EL material is placed on the substrate immediately after its placement so that the organic EL material can be heated and dried. Moreover, in the present invention, since the drying by heating is carried out while controlling the substrate temperature so as to prevent the rising thereof, the risk of heating a nozzle for applying the organic EL material to cause a change in the ink concentration, or to cause a poor ink discharge, can be lowered. Consequently, an EL layer of uniform thickness can be obtained in the present invention.

On the other hand, Kawase discloses a method of manufacturing an organic EL display by using the ink jet method. However, Kawase does not disclose or suggest drying an organic EL material by heating while relatively moving a heating device in X (longitudinal), Y (lateral), and Z (up and down) direction to the substrate. In addition, Kawase also does not disclose or suggest that the temperature of the substrate is controlled to prevent the rise in the substrate temperature.

Further, in Gordon, it is disclosed that the ink-jet nozzles and heater are combined to dry ink-jet ink. Gordon, moreover, discloses a description of relatively moving the ink-jet nozzles in X (longitudinal) direction, Y (lateral) direction, and Z (up and down) directions relative to the substrate. Nonetheless, neither Gordon nor Nanto describes or suggests that the ink-jet is heated and dried while controlling the temperature of the substrate so as to prevent the rise of the substrate temperature.

Furthermore, Pham et al. discloses that the substrate may be previously heated to the solvent evaporating temperature, and that the ink is applied to the substrate. However, Pham neither discloses nor suggests the feature claimed in the present invention that "heat-drying is carried out while controlling the temperature of the substrate not to rise".

For these reasons, the Applicant does not consider amended Claim 1 to be obvious in view of the cited references, and respectfully requests that the rejections to Claim 1 and the dependent claims be withdrawn.

In light of the foregoing response, all the outstanding objections and rejections are considered overcome. Applicant respectfully submits that this application should

now be in condition for allowance and respectfully requests favorable consideration.

Respectfully submitted,

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Date

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